Department of the Army Pamphlet 710-7

Inventory Management

Hazardous Material Management Program

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SUMMARY of CHANGE

DA PAM 710-7 Hazardous Material Management Program

This new Department of the Army pamphlet, dated 31 July 2007--

- o Clarifies the scope of Army hazardous material management programs (para 1-7).
- o Elaborates on hazardous material management program responsibilities and roles of Army offices and organizations (para 2-2).
- o Outlines recommended business practices to achieve a full implementation of garrison or depot hazardous material management programs (para 2-3).

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Hazardous Material Management Program

By Order of the Secretary of the Army:

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History. This is a new Department of the Army pamphlet.

Summary. The hazardous material management program is established to provide standard Army practices for the centralized control and management of hazardous material. Centralized control and management improves accountability, acquisition compliance, and mission readiness. Centralization is achieved through integration of selected logistic, environmental, safety, and occupational health practices into day-to-day operations. The basic premise of an Army hazardous material management program is that the centralized management and control of hazardous material across the installation/

depot will reduce the cost for acquiring and disposing of hazardous material; enhance mission accomplishment by reducing the logistics footprint and streamlining operations; promote the safe storage, handling, and use of hazardous material; and reduce risk to personnel and the environment. This pamphlet provides those standard business practices that can be tailored to installation/depot mission and size.

Applicability. This pamphlet applies to the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve, unless otherwise stated.

Proponent and exception authority. The proponent of this pamphlet is the Deputy Chief of Staff, G-4. The Deputy Chief of Staff, G-4 has the authority to approve exceptions or waivers to this pamphlet that are consistent with controlling law and regulations. The Deputy Chief of Staff, G-4 may delegate this authority, in writing, to a division chief within the proponent agency in the grade of colonel or the civilian equivalent. Activities may request a waiver to this pamphlet by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

Suggested improvements. Users are invited to send in comments and suggested improvement to this pamphlet. Internet users may submit their comments and suggested improvements using the electronic version of DA Form 2028 (Recommended Changes to Publications and Blank Forms). Anyone without Internet access should submit comments and suggested improvements on DA Form 2028 directly to the Deputy Chief of Staff, G–4, ATTN: DALO–SUS, 500 Army Pentagon, Washington, DC 20310–0500.

Distribution. This publication is available in electronic media only and is intended for command levels C, D, and E for the Active Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

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Glossary

Chapter 1 General

1-1. Purpose

This pamphlet has been developed to assist commanders and staff in implementing a standard, Armywide Hazardous Material Management Program (HMMP). The purpose of the HMMP is to integrate accountability for hazardous material (HM) into day-to-day decisionmaking, planning, operations, and compliance across all Army missions, activities, and functions on the installation (garrison, depot, State Area Command (STARC), or Joint Force Headquarters (JFH) or in regional clusters of installations). This pamphlet expands on the HMMP policy contained in Army Regulation (AR) 710–2, providing guidance for establishing standard, centralized management business practices that can be tailored to account for different size installations with varied operational missions. Army commands with responsibility for installations can also provide guidance for phased implementation of HMMPs to coincide with the availability of automated management applications and funding.

1-2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

1-3. Explanation of abbreviations and terms

Abbreviations and special terms used in this pamphlet are explained in the glossary.

1-4. Background

- a. The Deputy Chief of Staff, G-4 (DCS, G-4) and the Assistant Chief of Staff for Installation Management initiated the Army HMMP, recognizing that integrating environmental principles into logistics mission operations creates the opportunity for achieving efficiencies and economies in addition to meeting compliance requirements.
 - b. It was anticipated that installations implementing HMMP to the extent possible would find that the HMMP—
- (1) Helps the commander protect human health and the environment through enhanced compliance with existing laws and regulations.
- (2) Generates savings through reduced hazardous material (HM) usage, eliminates duplicate tracking and information systems, and minimizes the use of protective clothing and equipment and special procedures required for HM/hazardous waste (HW) exposure.
 - (3) Supports meeting the tasks imposed by Executive Order (EO) 13423.
- (4) Aids in meeting regulatory requirements for overseas operations covered by host nation agreements or final governing standards (FGSs).
- (5) Contributes to safe handling of HM and reduces the potential for notices of violations and the monetary fines associated with them.
 - (6) Provides data showing the status and location of HM to all installation organizations requiring that information.
- (7) Realizes cost avoidance or savings in both the procurement of hazardous materials and the disposal of hazardous and solid wastes.
- (8) Addresses inherent problems with shelf-life expirations, environmental and occupational health and safety risks, safe storage requirements, security, disposal and liability costs, and tracking and reporting requirements.

1-5. Current situation

- a. U.S. Army installations are procuring significant quantities of HM and generating large amounts of HW. Past and current business practices often result in purchasing more HM than is needed for near-term requirements, which in turn results in excess quantities of material being disposed of for expired shelf life or deteriorated containers. HW generation contributes to landfill problems and results in additional disposal costs. Consistent with EOs, emerging Department of Defense (DOD) and Army sustainability guidance documents mandate improved HM/HW control and establish mandatory reduction goals.
- b. New and emerging legislation, EOs, and Code of Federal Regulations (CFR) have increased installation reporting requirements. Similarly, emerging FGSs have increased controls on forward-stationed Army units. These requirements impact current accepted operational and logistic missions.
- c. HMMPs currently exist at many installations and overseas organizations. Previous Army guidance suggested the adoption of eight business practices and the use of the Hazardous Substance Management System software, but it did not make this approach mandatory. A review of installation HMMP programs revealed that operational concepts, business practices, and data conventions varied widely. There were no Army metrics to measure the success of the program or to generate required standard data. Individual installations achieved varying levels of success. Furthermore, the lack of standardization limited successes in implementing supply chain integration and sustainability goals/objectives. Soldiers transferring between installations had to be retrained on different local procedures.

1-6. Objective

The core objective is to improve logistics and operational mission performance by controlling and reducing the acquisition, use, handling, and disposal of HM and the generation of HW, consistent with Army supply chain integration and sustainability objectives. To support this primary objective, the DCS, G-4 intends to integrate HMMP procedures into the Single Army Logistics Enterprise to eliminate stovepipe automation systems and dual data entry.

1-7. Scope

- a. This document is applicable both in the continental United States (CONUS) and outside the continental United States (OCONUS). In CONUS these procedures address the centralized management and visibility of hazardous material at installations, depots, and regional clusters of installations. OCONUS, they apply to tactical support activities providing HM management services for forward-stationed units and U.S. military communities. The procedures are intended to assist OCONUS U.S. Army units and facilities in meeting operational requirements and the terms of FGS established in cooperation with host nations.
- b. To reduce or eliminate harm to human health and the environment from the use of HM and releases of pollutants to the environment, HMMP policy and procedures attempt to reduce risks and pollution at the source. Sound mission, environmental, and industrial health management practices include the review of processes to identify the use of hazardous materials. Process reviews result in identification of training, protection, and facility requirements (for example, proper storage) and aid in identification of possible material substitutes.
- c. Not specifically addressed under the HMMP scope are munitions, pesticides, asbestos, radiological, and HM used in the treatment of patients at medical facilities or in medical protocols at medical research facilities. These areas are currently addressed under separate programs. However, they may be incorporated under HMMP doctrine as enterprise resource planning software capabilities and policies evolve.
 - d. Facilities not specifically required to establish HMMPs but not excluded from voluntary participation are—
 - (1) Forward-deployed tactical support bases.
 - (2) Leased, joint-use, and similar facilities to the extent that Army is not the garrison commander.
- (3) Army installations that do not have more than minimal potential to affect the natural environment (for example, offices whose operations are primarily administrative, including Army command headquarters, contracting offices, defense attaché offices, security assistance offices, foreign buying offices, and other similar organizations).
 - (4) Army National Guard (ARNG) armories or U.S. Army Reserve centers, unless they are—
 - (a) Tenant activities on an installation with an HMMP.
 - (b) In a regional collection of closely located facilities served by an HMMP.
 - (5) Geographically isolated facilities, which make participation in an HMMP impractical or cost ineffective.
- (6) Medical facilities such as hospitals, medical, dental, and veterinary clinics and medical research facilities, except those directed to participate by The Surgeon General.
- (7) Commissary and Army Air Force Exchange Service retail tenant activities on Army installations, except for reporting purchases and inventory used in operations and maintenance processes as determined by the installation commander.
- (8) Nonappropriated fund activities on installations, except for reporting HM purchases and inventory used in operations and maintenance processes as determined by the installation commander.

Chapter 2 Procedures

2-1. General

- a. Sound HM management practices must be incorporated into Army doctrine, operations, and training. As required by AR 710–2, Army installations will establish centralized HM management in the form of an HMMP. Centralized management is focused upon and is driven by environmental impacts, cost effectiveness, mission performance efficiencies, supply chain integration, sustainability considerations, and safety of personnel. It is the role of each level of command to ensure that DA HMMP policy and procedures are implemented and metrics are established to measure progress toward HMMP goals.
- b. An Army HMMP integrates the management of a selected set of the traditional functions of the installation environmental, contracting, logistics, safety, and industrial hygiene offices. The fundamental premise of an Army HMMP is to minimize, track, and control the ordering, storing, distribution, use, and disposition of HM through effective use of pre-authorizations and single-point control. It also facilitates tracking of HW from generation to final disposal. Essential to the program is the requirement to track HM at the constituent level and the use of an automated tool to facilitate tracking and reporting.
- c. Meaningful performance indicators are established by HQDA but may be supplemented by subordinate commands. They are measurable, verifiable, reproducible, linked to HMMP management and business practices, and

consistent with EOs. Reports are prepared at the installation level or extracted from enterprise automation planning systems based on published guidance.

2-2. Scaling the installation program

- a. Army commands with responsibilities for installations will establish HMMP implementation guidance, taking the factors listed above into consideration. The intent is to create HMMPs that reflect good business sense and support the installation mission. Important aspects are how to best implement an HMMP and how to scale an HMMP to match the installation's mission and number of HM transactions (HMMP operational tempo). Scaling can be based on any one or combination of the following factors:
 - (1) The size and mission of an installation.
 - (2) The numbers and types of HM.
 - (3) The quantity of HM transactions.
 - (4) The number of chemicals meeting reporting thresholds for environmental compliance reporting.
 - (5) The number and types of environmental permits required to maintain operations.
 - (6) Geographic location or separation from supporting installations.
 - (7) Past environmental compliance record and status.
 - (8) Personnel exposure and injury record.
- b. For example, an installation with an industrial operation using high quantities of HM will require a more detailed and dynamic program than a headquarters garrison with no large maintenance operation that has not met a chemical reporting threshold in the past 10 years. Forward-stationed organizations are subject to the requirements of the appropriate FGSs. Because reporting requirements may not be as extensive overseas, data collection and business practices should be adapted by OCONUS HMMPs to fit their specific set of circumstances consistent with the overall goals of the program.
- c. The degree of implementation may also be affected by the availability and evolving capability of enterprise resource planning applications. Further guidance to assist commanders in implementing their HMMP business practices is discussed in the paragraphs below.

2-3. Business practices

- a. It is DA policy to establish standardized and centralized HM and HW business practices that reduce or prevent pollution by controlling and reducing the acquisition, use, handling, and disposition of HM and the generation of HW. The Army HMMP provides commanders with a structure and business practices to implement centralized HM management.
- b. The fundamental purpose of the Army HMMP is to minimize, control, and track HM at the constituent level throughout its life cycle on an installation using a single control point. The following paragraphs provide business practices that, when implemented, will facilitate achieving Army HMMP purposes, goals, and objectives. The following business practices are considered standard for HMMPs at Army installations.

2-4. Business practices and implementation guidance

- a. Establish centralized management and visibility of HM throughout its life cycle on the installation. Centralized HM management includes policy, guidance, and day-to-day operations.
 - (1) HQDA publishes overall HMMP policy and guidance for implementation Armywide.
- (2) The U.S. Army Materiel Command, the Installation Management Command (IMCOM), other Direct Reporting Units, the National Guard Bureau, and forward-stationed Army Service Component Commands develop supplementary guidance for compliance by subordinate and tenant commands, units, and activities.
 - (3) The installation commander establishes local HMMP policy and procedure guidance.
 - (4) The centralized HM control point (HMCP) conducts day-to-day operations.
- (5) Units, activities, and facilities publish standard operating procedures (SOPs) consistent with installation and higher headquarters policy and guidance.
 - b. Create a HMMP committee
- (1) Committees are established to assist commanders in developing and maintaining centralized HMMP policy, guidance, and business practices and in providing program oversight. The committee is responsible for identifying the resources required to implement successfully the HMMP and for developing evaluation criteria to measure the success of the local program. Unresolved issues are forwarded to the installation commander or designee. In lieu of an HMMP committee, commanders may utilize an existing environmental quality control committee (EQCC) to assist with oversight of the HMMP.
- (2) Size and membership will vary by the size and mission of the installation. Membership is determined by the commander and may be adjusted to meet local requirements. Minimum committee membership normally includes—
 - (a) Directorate of logistics (DOL).
 - (b) Environmental office.

- (c) Safety office.
- (d) Industrial hygiene (IH) office.
- (e) Directorate of public works (DPW).
- (f) HMCP.
- (g) Tenant units and activities participating in the installation HMMP.
- c. Establish local authorized use/user lists (AULs) to identify approved processes and control HM used in the processes.
 - (1) Description.
- (a) AULs are normally established at the installation or facility level and comprise two components: authorized processes and authorized hazardous materials.
- (b) An AUL is used to control acquisition, identify types of HM usage, estimate HW generation, and prepare environmental reporting and as a pollution prevention tool. The Army goal is to validate automatically each HM transaction against established authorizations prior to procurement and issue. Unauthorized requests should result in a review and decision process before proceeding. Installations should ensure that HM identified by technical manuals, equipment documentation and required for basic loads are included in their AULs. Each distinct operation, such as painting, using a re-circulating solvent parts washer, or conducting research protocols, constitutes an HMMP process. Processes may be activity specific but are generally not location specific. The use of the AUL facilitates—
 - 1. Visibility of specific chemicals on an installation or within a region.
 - 2. Ability to restrict use of specified chemicals.
 - 3. Installation pollution prevention opportunity assessments.
 - 4. Identification of HM used to support specific weapon systems (for program manager life-cycle management).
 - 5. Identification of waste streams generated by weapon systems (for program manager life-cycle planning).
 - 6. Identification of training requirements.
 - 7. Identification of potential exposure information.
 - 8. Possible HM substitution.
- (c) Environmental, safety, and IH offices, working through an HMMP committee, review and approve processes and HM approved for use in those processes. A key source of mission processes and material used in those processes are the equipment technical manuals and lubrication orders.
 - (2) Authorized processes.
- (a) Processes identify what and how a material is used, potential exposure risks, and what waste streams to expect. Characterizing, or describing, processes that use HM or generate HW is a key element of a strong pollution prevention program, supports compliance reporting, and forms the basis for process improvement. Reviews of processes should include identification of hazardous chemicals listed in Part 1910, Title 29, Code of Federal Regulations (29 CFR 1910). Installations may include process algorithms as part of their AUL. Algorithms predict the fate of materials used in a process and use the information to collect data for the Emergency Planning & Community Right-to-Know Act (EPCRA) Form R Report and for pollution prevention opportunity assessments. The environmental, IH, and safety offices work jointly to determine and document local processes and algorithms. Identifying and describing a process includes identification and characterization of generated waste streams. Installations review and update processes at least every 5 years. The U.S. Army Center for Health Promotion and Preventive Medicine can assist installations in publishing processes and generic algorithms for developing local AULs and local AUL algorithms.
- (b) A process can be detailed or generic. Detailed processes facilitate more accurate emission estimation and reporting. Less detailed processes are easier to establish and track but provide less information for compliance reporting and pollution prevention opportunity assessments. An example of a very detailed process is spray painting in a specific booth using a specific type of air filtration system and a specific spray gun. Examples of more manageable detailed processes are high-volume, low-pressure spray painting, spray painting, or roller/brush painting. An example of a generic process is "painting."
- (c) The recommended method of establishing processes is to describe the process actually occurring. Examples of these processes are spray painting, aerosol paint spraying, or brush/roller painting. This level of detail facilitates creating more accurate algorithms for capturing release information and for pollution prevention opportunity assessments. It also facilitates more accurate identification of potential chemical exposure.
- (d) As a minimum, processes will be defined by the using shops with HM linked to that shop—for example, "DPW Paint Shop." This general process includes the various methods of painting (spray, brush, roller, and aerosol). All paints and materials used by the DPW Paint Shop, regardless of application method or amounts of releases, are linked to the single process of Paint Shop. This method is easy to use but significantly limits use of HMMP data for environmental reporting (toxic release inventory, air emission, and so on) and pollution prevention opportunity assessments.
- (e) Installations should establish or choose process descriptions providing sufficient detail to support environmental reporting requirements and periodic pollution prevention opportunity assessments. Installations should also attempt to link HM usage and HW generation to end-item maintenance. More detailed process characterizations should be

established when one of the HM used contains a chemical likely to meet or exceed a threshold planning quantity (TPO).

- (3) Authorized hazardous materials.
- (a) Identification and documentation of approved HM facilitates necessary tracking and regulatory reporting. HM is approved and tracked at the chemical constituent level, as provided by the manufacturer's material safety data sheet and other supplementary sources, and is linked to the process authorized to use the material. Installations track those products containing chemicals listed by the Environmental Protection Agency (EPA) List of Lists, 29 CFR 1910, or equivalent overseas regulatory organizations as agreed to in the applicable FGS. When reviewing HM, committees concentrate on quantity, toxicity, and exposure potential of the materials. HM is also approved, ordered, issued, and tracked by unit of use. High and low levels of HM stockage are established and tracked. This facilitates more efficient usage, less risk to personnel, and usable pollution prevention opportunity assessment information.
- (b) Installations track all material requiring an MSDS that contains a reportable chemical. This supports regulatory reporting, process reviews, and HMMP metric reporting. Approved HM is always linked and issued to using processes. Linking supports regulatory reporting and local Environmental Management System and pollution prevention programs. Medical and research facilities are exempt from EPCRA reporting requirements, to include facility maintenance of their buildings. Forward-stationed Army organizations are also exempt from EPCRA reporting.
- (c) The initial AUL HM list will normally be created by conducting a formal inventory, identification, review, and approval of all HM on an installation during HMMP implementation. HMMP committees identify required materials and compare them to chemical lists and manufacturers' MSDSs to determine which should be approved. Technical manuals (TMs) and lab protocols determine material needed for mission performance. Other considerations are products containing chemicals likely to reach reporting thresholds or having special safety concerns, toxicity, and exposure potential. Chemicals affecting environmental permits will be tracked.
- (d) All activities possessing or using HM will ensure that the manufacturer's MSDS is readily available. Lists of approved HM are maintained electronically.
- (e) The committee determines what HM is in the AUL and tracked. As a minimum, all HM listed on unit authorized stockage lists (ASLs) and unit basic loads (UBLs) and other materials containing EPA and Occupational Safety and Health Administration (OSHA)-listed chemicals or their overseas equivalents are included. Final lists are consistent with DA policy and Federal, State, local, and treaty requirements.
- (4) Recording the AUL. Each command, installation, unit, or facility records its AUL decisions. The following minimum information is recorded and maintained to track day-to-day transactions and for EPCRA compliance reporting. Overseas HMMPs will track the data elements necessary to comply with FGSs and management reporting requirements.
- (a) Process. This includes name, process identification code, technical reference, location (building, floor, room), responsible POC information, material approved for use in process, generated waste streams, required personal protective equipment (PPE), required process equipment and/or filtration equipment, required training, weapon system that process will be used on, and date process last reviewed.
- (b) Material. This includes stock number, nomenclature, unit of measure, unit of issue, unit of use, type of container, kit or individual item, and applicable alternative units of use.
- (c) Chemical Abstract Service information for each chemical. This includes the Chemical Abstract Service number, chemical name and alternative names, hazard category, health category, hazard type, class, physical states, density, source reduction methods, regulatory lists chemical is on, OSHA limits, American Council of Government Industrial Hygienist threshold limits, EPA TPQ, OSHA TPQ, site TPQ, and other hazards (volatile organic compound (VOC), extremely hazardous substance, hazardous air pollutant, and ozone depleting substance).
- (d) MSDS. This includes the MSDS number, trade name, part number, manufacturer and Commercial and Government Entity code, manufacturer's MSDS number (if available), chemical constituents and percentages, hazards, product state and mixture status, VOC content, specific gravity, volatility by volume and weight, solubility in water, flash point, and container and storage information. Other minimum product information includes shelf-life code, reactivity code, and disposition information.
- (e) Master record. (A master record establishes a unique combination of a stock number/part number and MSDS. This facilitates tracking chemical inventory on the installation). Minimum information includes MSDS number, applicable NSN, part number, Universal Product Code code, approval status, and authorization limits (work center, person, zone, and so on).
- d. Establish central HMCPs to centrally procure, receive, issue, distribute, store, and track HM throughout its material life cycle.
- (1) *Definition*. These points are part of an established supply operation and are normally referred to as HMCPs, HM control centers, or other locally determined name. The central HMCP ensures continuous visibility of HM on the installation and is responsive to customer needs. Local standard levels of service may include HM delivery and pickup (depending upon mission, geography, organization, and resources). HM delivery and pickup improves control and shop/lab efficiency and offers an opportunity to link HM and HW operations.
 - (2) Discussion. In most cases the HMCP is integrated into an existing supply operation. It procures, receives, stores,

issues, and re-issues HM throughout the material life cycle. To the extent possible, HM storage is limited to critical or long lead time and re-use items. Just-in-time procurement is used for the majority of HM. In the ARNG, centralized HMCPs are established at the JFH/STARC, the U.S. Property & Fiscal Office, an HMMP region, or ARNG garrison. On IMCOM garrisons, the HMCP is established and controlled by the director of logistics (DOL). U.S. Army Materiel Command depots typically operate the HMCP for the benefit of the tenant depot and the host installation. Overseas HMCPs are operated by the theater logistics command or local logistics activities.

- (a) Major environmental aspects to the supply operation include recording HM transactions at the chemical constituent level, identifying HM for tracking, tracking HM movement at the product and chemical constituent level, establishing re-use/re-issue capability, and recording material disposition. Additional manpower requirements to manage HM centrally are based on the number of HM transactions conducted per day, geography, facilities, and tracking methodology/system. A single database should be used in every situation. Where possible, just-in-time requisitioning or local purchase is used by the HMCP to reduce the amount of HM stored on the garrison and the potential of expired shelf-life disposals.
- (b) Installations may establish a single HMCP or supplement the central HMCP with satellite HMCPs as required, but all inventories and transactions are made in a single database. This facilitates installationwide visibility of assets for cross-leveling, tracking, and reporting. Individual activities, organizations, and production lines obtain all HM through the HMCP. An alternative to satellite HMCPs is a delivery service to distribute HM among the vendors, HMCP, and shops. The delivery service can also pick up containerized wastes for processing by the HW office. Installations should establish controls over the purchase of HM with Government purchase cards (GPCs) to ensure that all HM entering the installation is recorded and tracked by the HMCP. Preferably, installations should preclude the use of GPCs for HM procurement by all but the HMCP.
 - e. Track HM throughout its life cycle on the installation.
 - (1) Description. Tracking of HM from the point of procurement through final disposition is conducted to-
 - (a) Limit HM brought on the garrison to that which is approved.
 - (b) Maintain a near real-time HM and chemical inventory from time/point of entry to time/point of departure.
 - (c) Control HM issues to approved activities and trained individuals.
 - (d) Manage HM shelf life.
 - (e) Comply with regulatory requirements.
 - (f) Provide potential exposure information.
 - (g) Identify training and equipment requirement.
 - (h) Identify pollution prevention opportunities.
 - (i) Collect life-cycle cost information for program managers.
- (2) *HM approval, ordering, issuing, and tracking by unit of use.* Each HM is approved for use in specific process. High and low levels of HM stockage are established and tracked. This facilitates more efficient usage, less risk to personnel, and useable pollution prevention opportunity assessment information.
 - (3) What to track
- (a) All installations should track HM at the chemical constituent level using a manufacturer's MSDS as the source of chemical constituent information. Electronic MSDSs are usually available on the Internet on the Defense Hazardous Materials Information Resource System (HMIRS) site (www.dlis.dla.mil/hmirs) with a user identification, or on university sites, on compact disks, or directly from the manufacturer or distributor. As the fielding of the Single Army Logistics Enterprise occurs, information pertaining to MSDSs will be available through the operating platform. These sources provide sufficient HM chemical constituent, physical property, and handling information.
- (b) The installation committee is responsible for determining what HM to track. Tracking all products requiring an MSDS throughout their life cycles on the installation is recommended. At a minimum, installations should track those products containing chemicals necessary to comply with environmental reporting and permitting requirements. Environmental and or safety offices should review material requiring MSDSs that list these chemicals to determine which materials are most likely to or could possibly reach reporting thresholds, and track these items. All installations should track EPA Priority Chemicals and their associated processes. Other minimum tracking criteria, by category, follow:
 - (4) Minimum tracking points.
- (a) Requisition. Determine if material is on the AUL, if personnel are trained to use the material, or if a less hazardous material could be substituted.
- (b) Receipt. Determine what items received (document number, stock number, nomenclature, part number, quantity, manufacturer/vendor, MSDS number, chemical constituents quantity, expiration date), who/when received, where stored, and whether receiving location is authorized to receive/store the item.
 - (c) Storage. Determine location where items are stored.
- (d) Issue/re-issue. Determine quantity issued/re-issued (material and chemical constituent(s)); material classification; process issued to; to whom issued, if that person is trained, if that person has mandatory equipment; and location issued to.

- (e) Return to storage. Determine quantity returned (product and constituents), from whom, storage process and location, and material classification.
- (f) Transfer between activities. Determine what and how much transferred (product and constituents), what is date/time of transfer, what are losing and gaining processes, and what are losing and gaining locations.
- (g) Transfer offsite. Determine what and how much transferred (product and constituents), what are losing process and location, what is gaining address, losing and gaining POCs, and what are date and time of transfer.
- (h) Actual usage. Determine how much product (product and chemical constituent) was actually used by volume/quantity issued or calculated by the process, inclusive of the date and time of reported usage.
- (i) Recycling. What and how much was recycled (product and constituent), what was recycling process, how much returned to storage, where returned, and what process returned to? This is similar to receipt. Recycling process descriptions should also include related waste streams.
- (j) Disposal information. As a minimum, this includes the turn-in date, material description, and quantity. Disposal information may also include all information needed to meet Resource Conservation and Recovery Act requirements and the supporting Defense Reutilization and Marketing Office, such as container identification, type, and size; quantity; chemical constituents by percentage; contract and contract line number, individual and total costs, generator and final disposal locations; start date; container close date; container pickup date; transfer dates; and, disposal certification date.
 - (5) Recording tracking transactions.
- (a) Each installation captures all AUL and tracking transactions as they occur at the process, product and chemical inventory levels.
- (b) Installations are identified by name, location, EPA Federal Facility Identification number (if applicable), and toxic release inventory number (if applicable).
 - f. Reduce HM inventory at the user or operator level.
- (1) Description. Establish realistic operating levels of HM at the user/operator level. Reduction of HM inventories improves readiness by reducing capital investment costs (procurement, storage and handling), reducing potential hazards to personnel, and reducing shelf-life expiration disposals. This also requires a responsive HMCP with authority for expedited procurements to meet mission needs. HM reduction should be accomplished down to the user/operator level by reviewing stockage to ensure only sufficient material for immediate usage or a single job/protocol is on hand. Typically this translates to a 7- to 14-day supply of HM at the job site. Less hazardous material should be substituted whenever possible. This applies to all Army installations and activities.
 - (2) Discussion.
- (a) Activities with shop or bench stock inventories will review stockage levels to determine which items can be reduced or replaced by less hazardous materials. Excess items should be returned to the HMCP for redistribution and use prior to expiration date. Review HM usage to order products by units of use to the extent possible. For example, if the most common use of oil is by the quart, order oil by the quart rather than by 55-gallon drum. Rely on the HMCP for rapid replenishment. HM should be returned to an approved storage locker when not in use.
- (b) Give HMCPs authority and responsibility to conduct GPC card and other local purchases, instead of individual shops and activities. Supervisors should periodically review TMs and prescribed maintenance procedures and recommend opportunities to reduce HM or reduce HW generation to weapon system managers.
- (c) Troop installations should review operational loads, ASLs, and UBLs to determine if HM stockage levels can be reduced without adverse impact on readiness. Review HM usage to order products by units of use to the extent possible. Maintenance activities should eliminate the practice of buying similar products from multiple vendors to reduce handling and management. While in garrison, all activities are directed to obtain HM through the HMCPs. HMCPs are directed to provide required material within specified periods of time (just-in-time procurement). This reduces HM storage requirements within units and the HMCP. Publish policy precluding the use of GPC cards for HM procurement by all but the HMCP.
- (d) Installations and activities using dedicated supply delivery systems can reduce HM stockage at the user/operator level by delivering HM as needed. Automated, manual, electronic, and telephonic procedures can be established. Timely support by the supporting supply activity and/or HMCP is essential for these business practices to be successful. Establish recycling capabilities where practical to reduce procurement costs and inventory levels. Example candidates for recycling are antifreeze, part cleaning solvent, and motor oil.
- g. Manage and track HM by shelf life to use material for its intended purpose before expiration in accordance with DOD 4140.27–M.
- (1) Description. Management of material shelf life supports the reduction of acquisition and waste processing costs. All Army installations record and use product shelf-life information to ensure use or return of products, prior to expiration date. Local procedures will include shelf-life management practices to be followed. As HM is received, the shelf life is verified and recorded, and material is stored and issued using oldest dates first. Inventory listings are reviewed periodically to identify material nearing expiration dates. Material is issued, examined for shelf-life extension, and/or returned in accordance with Army supply policy. Methods of tracking and managing may vary. Activities using

- a tracking system with barcode capability include shelf-life information on the barcode. Data are used to prepare periodic reports identifying HM with nearing shelf-life expiration dates.
- (2) *Procedures*. Examine HM at time of receipt. Material expiring within 60 days should be challenged for possible return to source of supply. Container barcodes are annotated with expiration date. HM is stored by expiration date. Activities with small stockage levels (for example, fewer than 15 cans of an item on hand at any one time) should store containers by shelf life (older containers in front) and use first in/first out business practices.
- h. Establish periodic HMMP compliance self-assessments and audits to identify compliance procedure improvements.
- (1) Description. Installations incorporate HMMP considerations into existing audit systems to determine the status of HMMP procedures and regulatory compliance. Assessments can be formal and informal. For example, a maintenance assistance visit can include identifying HM in the workspace that is not consistent with the specified procedure or that is not in the HMMP AUL.
 - (2) Procedures.
- (a) Installations should establish specific periodic reviews of their HMMP, to include assistance visits to activities and tenants. Self-audits can be achieved through formal and informal inspection by environmental and safety offices or by supervisors. Assistance teams can also be established. Shop and bench stock inventories should be reviewed to ensure stockage levels are not excessive and to determine which items can be reduced or replaced by less hazardous materials. Items that cannot be used within a minimum period (for example, 2 weeks) or for a specific scheduled production period should be returned to the HMCP for redistribution and use prior to expiration date. These visits should also include an audit of on-hand stocks to verify that material was issued through the HMCP, to ensure shops are properly reporting usage, and to verify that appropriate MSDSs are on hand.
- (b) Installations could also incorporate these checks into existing visits by environmental and safety staff as well as supervisors/managers. Stocks contained in basic load, operational load, and prescribed load list and ASL should be reviewed and updated during these visits. These checks should also include an audit of on-hand stocks to verify that material is being issued via the HMCP, to ensure units are properly reporting usage and to verify that appropriate MSDSs are on hand.
 - i. Ensure personnel are trained in safe handling of HM and related hazardous communication subjects.
- (1) *Description*. Supervisors should ensure that all personnel handling or being exposed to HM receive and are current in required training. Personnel required to wear personal protective equipment (PPE) should be trained in the use of the PPE, be issued the PPE, and ensure PPE serviceability.
- (2) *Procedures*. Supporting safety, environmental, and/or IH offices should review operations to determine what training is required. This information is documented and reported to supervisors. Employees are notified of required training. Responsible training offices schedule and conduct training. Commanders, supervisors, and managers are responsible for ensuring personnel successfully complete training.
 - j. Establish and track HMMP metrics.
- (1) The Army records, reviews, and analyzes HM operational data as a source of information to measure HMMP effectiveness. Performance measures (metrics) are measurable, verifiable, reproducible, and linked to HMMP management and business practices. Initially, HQDA may wish to track the implementation of HMMPs at installations. As the Single Army Logistics Enterprise reaches full fielding, more detailed metrics may be established and tracked without placing additional reporting burdens on installations. The following metrics are initially established:
- (a) Percentage of installations that have implemented an HMMP that includes all appropriate organizations and activities on the installation.
- (b) Percent reduction of HM acquisition costs. Associated with a reduction in HM usage is a reduction in procurement and HW processing costs. Army garrison HW streams have historically included significant percentages of HM with an expired shelf life. The DA goal is to reduce HM acquisition costs by 5 percent per annum, based on a baseline year of 2005. This is an Armywide metric. Depots and troop garrisons normally have greater cost-reduction opportunities than smaller facilities. However, all Army installations strive toward meeting the HM acquisition and HW processing cost-reduction goal.
- (2) Army Commands, Direct Reporting Units, and installations may establish supplemental metrics to aid in the tracking of progress toward Army or command goals.

Appendix A References

Section I

Required Publications

AR 710-2

Supply Management Below the National Level. (Cited in paras 1–1, 2–1, C–1.)

Section II

Related Publications

A related publication is a source of additional information. The user does not have to read a related publication to understand this publication. DOD publications are available from www.dtic.mil/whs/directives. The CFR is available at http://ecfr.gpoaccess.gov. Executive Orders are available from www.archives.gov/research/index.html. U.S. Code citations are available from www.gpoaccess.gov/uscode.

AR 200-1

Environmental Protection and Enhancement

AR 420-49

Utility Services

AR 711-7

Supply Chain Management

TM 38-410

Storage and Handling of Hazardous Material. (Available from https://www.logsa.army.mil/etms/online.cfm.)

DOD 4140.1

Material Management Policy

DOD 4140.27-M

Shelf-Life Item Management Manual

DOD 4145.19-R-1

Hazardous Materials Storage and Handling Criteria

DODI 4715.4

Pollution Prevention

DODI 6050.05

DOD Hazard Communication (HAZCOM) Program

EO 12873

Federal Acquisition, Recycling, and Waste Prevention

EO 13423

Strengthening Federal Environmental, Energy, and Transportation Management

29 CFR 1910

Occupational Safety and Health Administration, Department of Labor

40 CFR 6

Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act

40 CFR 116

Designation of Hazardous Substances

40 CFR 117

Determination of Reportable Quantities for Hazardous Substances

40 CFR 260-265

Subchapter I-Solid Wastes, Parts 260-265-Hazardous Waste Management

40 CFR 266

Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities

40 CFR 300-374

Subchapter J-Superfund, Emergency Planning, and Community Right-to-Know Programs

40 CFR 702-799

Subchapter R-Toxic Substance Control Act

42 USC Chapter 116

Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA

EPA List of Lists Database

Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) and Section 112(r) of the Clean Air Act. (Available from http://web-services.gov/lol/.)

ISO 14000

International Organization of Standards management references. (Available to order at www.iso.org.)

Section III

Prescribed Forms

This section contains no entries.

Section IV

Referenced Forms

This section contains no entries.

Appendix B

Sample Garrison Committee Charter

B-1. Purpose

The purpose is to establish the garrison HMMP committee and define its composition, roles, and responsibilities. The garrison commander issues a committee charter as a memorandum.

B-2. Charter outline

The expanded outline below contains typical guidance that can be issued by a garrison commander to create a charter for the HMMP committee.

- a. Purpose. The charter establishes the "Fort Someplace" HMMP committee and defines the committee's objectives, composition, and responsibilities.
- b. Termination date. The committee is terminated at the direction of the garrison commander. This charter is reviewed annually by the committee and recommended changes are provided to the garrison commander for consideration and approval.
- c. Scope. The committee's responsibilities encompass the creation of policy, guidance, program management, and oversight for all aspects of the "Fort Someplace" HMMP.
- d. Committee objectives. The committee serves as the garrison commander's work group to improve the effectiveness of HM and HW management in daily mission accomplishment through a viable HMMP. This is accomplished by analyzing each segment of the acquisition, distribution, disposal, and business practice procedures. It is recognized that the speed, accuracy, and reliability of the requisition, receipt, storage, issue, use, and disposal of HM can be dramatically improved through adoption of HMMP business initiatives. Resulting data directly support garrison, sustainability, and supply chain integration objectives. The committee—

- (1) Recommends and develops HM and HW management policy and procedures for "Fort Someplace" consistent with policy and guidance from higher headquarters.
 - (2) Provides direction, decisions, and oversight for the adoption and introduction of HM and HW business practices.
- (3) Provides direction, decisions, and oversight for the implementation, operation, and expansion of HM management software throughout "Fort Someplace."
 - (4) Reviews and assesses process technology aimed at reducing HM usage and HW generation.
 - (5) Approves and reviews AUL for HM and processes using HM.
- (6) Reviews and assesses product substitution to remove from the inventory those products that pose an environmental or personnel hazard.
- (7) Reviews and assesses stockage levels for the DOL HMCP and any additional HM issue points that are established.
- (8) Develops evaluation criteria for statistical data designed to measure the performance of operations associated with HM and HW management. Reviews and analyzes statistical data collected from HM and HW operations.
- (9) Performs an annual management control review to ensure that the HMMP maintains its focus and achieves its objectives, in accordance with the garrison HMMP policy and guidance statement.
- e. Committee composition. The following command and staff organizations comprise the voting membership of the committee, with each organization having a single voting member:
 - (1) Garrison commander (chair).
 - (2) DOL.
 - (a) Director (deputy-chair).
 - (b) Supply program manager.
 - (c) HMCP manager.
 - (3) Director of public works-environmental division (ED).
 - (a) Director.
 - (b) Pollution prevention and EPCRA program manager.
 - (c) HW program manager.
 - (4) Safety officer.
 - (5) Fire chief.
 - (6) IH officer.
- (7) Major tenants, as selected by the commander: commander, deputy commander, executive officer, or safety officer.
- f. Participation. The commander may request the participation of adjunct members who serve in an advisory role and not as voting members of the HMMP. These could include, but are not limited to, representatives from the following organization/agencies:
 - (1) Directorate of information management (DOIM).
 - (2) HM end-user representatives.
 - (3) Morale, welfare, and recreation representative.
- g. Executive secretary. The commander will appoint an executive secretary with the additional duty of coordinator for the various subcommittees and/or teams established by the committee. The subcommittees/teams will focus on establishing specific policy guidelines pertaining to HM and HW management.
- h. Policy making. Through the formation and operation of functional subcommittees, the executive secretary will provide the operational link to the policy-making responsibilities of the committee.
 - i. Duties (by activity).
 - (1) The DOL—
- (a) Serves as lead activity for establishing and maintaining the garrison HMMP, establishes committee agendas, and schedules committee meetings.
- (b) Serves as the functional expert on all matters related to supply support (requisitioning, receipt, storage, issue, and re-issue).
- (c) Researches and identifies less hazardous products available from commercial sources that can be substituted for currently used products.
- (d) Identifies and provides, as required, data from existing logistics systems to facilitate committee research and decision making.
 - (e) Serves on subcommittees established to determine optimum quantities of materials to be authorized in the AUL.
- (f) Provides resources to input logistics data into HM management software, integrates HMCP practices into supply operations, conducts HM management software transactions, and provides transactional data to the committee, as required.
- (g) Conducts assessments to ensure that organizations are performing operations in accordance with established HMMP policy and procedures and reports to the committee.

- (2) The director, public works-ED-
- (a) Serves as the functional expert on all matters related to environmental pollution prevention and EPCRA reporting requirements.
- (b) Identifies pollution prevention alternatives that can be implemented to reduce the use of HM or generation of HW.
 - (c) Assists the DOL in the research and identification of substitute products
 - (d) Serves as the functional expert on all matters related to the MSDS program.
 - (e) Works with the industrial hygienist to assess HM exposure risks before authorization of HM for use.
- (f) Serves as the functional expert on all matters pertaining to HW, including management, safe handling, storage, regulatory compliance, and reporting.
- (g) Conducts assessments to ensure units are performing operations related to HM and HW, in accordance with established environmental policy and procedures.
 - (h) Assists the program manager for HM management software implementation.
 - (i) Provides resources to input HM and HW data into HM management software.
 - (j) Provides resources to input MSDS information into HM management software.
 - (k) Provides resources to input AUL data into HM management software.
 - (3) The safety officer—
 - (a) Serves as the functional expert on all matters pertaining to safety.
- (b) Conducts assessment, with the fire department to ensure that facilities are in compliance with existing safety regulations for the storage of HM and HW and reports to the committee.
 - (c) Ensures that safety PPE is available before authorizing the use of a HM.
 - (d) Serves on subcommittees where input to safety-related issues is required.
 - (e) Coordinates with the director, public works-ED to ensure that all safety-related data are populated in HSMS.
 - (4) The industrial hygienist—
 - (a) Serves as the functional expert in all matters related to industrial hygiene and health.
- (b) Conducts assessments, in conjunction with the fire department and safety office, on facilities to ensure that they are in compliance with existing IH regulations for the storage and use of HM and reports to the committee.
 - (c) Provides resources to input PPE and HM training data into HM management software.
 - (5) The fire chief—
 - (a) Serves as the functional expert in all matters related to fire safety.
- (b) Conducts, in conjunction with safety office and IH representatives, assessments of facilities to ensure that they are in compliance with existing fire safety regulations for the storage and use of HM and HW and reports to the committee.
- *j. Subcommittees and teams.* The committee forms subcommittees or teams, as required, to address specific functional areas or requirements. Examples of a subcommittees or teams are an HM team, an HW team, or an asbestos team.
- k. Committee meetings. The committee will meet as required, but at least quarterly. committee meetings will be held monthly during initial or new automation implementation. Dates and times for subsequent meetings are determined at the end of each session. The secretary will prepare agendas and distribute them electronically at least 3 days in advance of the meeting. The committee voting members are also invited to attend the quarterly EQCC meetings.
- l. Organization and administrative support. The committee members are responsible for their own transportation and any temporary duty costs.

Appendix C

Sample Garrison Policy Statement and Guidance

Included in this appendix are two sample documents for use as a guide for garrison commanders to establish policy and guidance for the garrison HMMP. These samples were prepared for a garrison with a director, directorate of public works and logistics (D–DPWL).

C-1. Sample policy statement

a. "Fort Someplace" policy is to manage hazardous substances (HM and HW) in an environmentally acceptable manner to enhance mission readiness, reduce and prevent pollution by controlling and reducing the acquisition, use, handling, and disposition of HM and generation of HW. An HMMP supports supply chain integration concepts and Army sustainability objectives. It is consistent with AR 710–2 and with all Federal, State, and local regulations and IMCOM guidance. Mission and environmental practices and requirements are integrated to establish and maintain a sound HMMP. "Fort Someplace" envisions continual improvement of its ability to sustain the mission and protect the environment. This will be accomplished by—

- (1) Identifying and documenting operations, processes and products that have environmental impacts.
- (2) Establishing centralized management and visibility of hazardous material and wastes.
- (3) Establishing an HMMP committee to plan for and oversee the HMMP and recommend policy and procedural changes.
 - (4) Implementing integrated operations installationwide.
 - (5) Conducting periodic audits to assess compliance and identify opportunities to enhance the mission.
 - b. Specific business practices incorporated into the "Fort Someplace" HMMP will include, but not be limited to—
- (1) Establishment of an AUL to document the identification, documentation, and approval of processes using HM and/or generating HW to control HM used on the garrison and to anticipate regulated waste streams.
 - (2) Centralized HM management and procurement consistent with the AUL.
 - (3) Tracking of HM and chemical constituents from acquisition to final disposition.
 - (4) Tracking of HW generation and disposal.
- (5) Use of HM management software and a centralized database to manage and track HMMP operations, as a source of information to document conformance with goals and objectives and as a compliance reporting tool.
 - (6) Hazard communication and HM/HW handling training.
- c. "Fort Someplace" activities, tenants, and personnel are required to comply with this policy, as well as all Federal, State, and local laws and regulations aimed at protecting human health and the environment. Failure to comply with these laws and regulations can lead to civil and criminal penalties not only against the garrison but also against its personnel. Accordingly, all activities, tenants, and personnel are directed to implement a sound HMMP consistent with this policy and procedure document.

C-2. Sample guidance document

The sample guidance document will in most cases take the form of a garrison regulation.

- a. Purpose. The purpose of this document is to establish a centralized HMMP and responsibilities for the management of HM and HW within "Fort Someplace." The core objective is to improve logistics and operational mission performance by controlling and reducing the acquisition, use, handling, and disposal of HM and the generation of HW, consistent with Army supply chain integration and sustainability objectives. This HMMP guidance assumes the operation of a hazardous material management automated tool.
 - b. Applicability. This program is applicable to all "Fort Someplace" activities, tenants and personnel.
- c. Proponent. The proponent for this program is the "Fort Someplace" D-DPWL. Recommendations are welcome and should be forwarded to the chief, DPWL-environmental division (ED), in writing. Recommended enhancements should include: submitting activity; POC name, address and telephone number; specific section to be enhanced; proposed enhancement and new text; and justification, to include benefits and drawbacks.
- d. The "Fort Someplace" HMMP mission statement. The "Fort Someplace" HMMP is an initiative to enhance readiness and improve sustainability through controlling and tracking the acquisition, use, handling and disposition of hazardous material. The program serves as the base focal point for hazardous material and hazardous waste management. It combines many of the traditional functions of the environmental division, supply, contracting, logistics, and garrison safety office. The "Fort Someplace" HMMP establishes an organization and business practices to implement centralized HM management throughout the garrison.
- e. Purpose. The fundamental purpose of the "Fort Someplace" HMMP is to minimize, track and control the ordering, storing, distribution, using and disposition of HM through effective use of single point control. It also facilitates tracking of HW from generation to final disposal. Essential to the program is the requirement to obtain and maintain updated copies of manufacturers' MSDSs for all HM brought onto the garrison. The program utilizes standard Army supply management systems and a hazardous material management application (HMMA) to facilitate necessary tracking and provide a centralized database for management and compliance reporting. The HMMA links processes to materials used and wastes generated. It tracks materials and chemical constituents throughout their life cycle on "Fort Someplace" and facilitates potential health hazard and exposure tracking. The HMMA also prepares key mandatory environmental reports and facilitates management reporting.
 - f. Duties.
 - (1) The commander—
- (a) Ensures that integrated logistics, environmental, occupational safety and health, and hazardous substances (HS) policy and procedures are established and disseminated garrisonwide.
 - (b) Appoints—
 - 1. An EQCC for environmental quality oversight.
 - 2. An HMMP committee, for day-to-day operational oversight.
 - (c) Ensures "Fort Someplace" compliance with applicable environmental guidance and procedures.
 - (d) Obtains necessary resources to maintain the HMMP.
 - (e) Chairs the HMMP committee.
 - (2) The D-DPWL—

- (a) Serves as deputy chair to and as a voting member of the "Fort Someplace" HMMP committee, schedules committee meetings, publishes agendas, and prepares reports for the garrison commander.
- (b) Establishes an HMCP to provide centralized acquisition, storage, issue, and tracking of HM throughout its life cycle on the garrison.
 - (c) Publishes an SOP for HMCP operations and customer support.
 - (d) Ensures HMCP personnel and other HMMA users receive proper HM management software training.
 - (e) Ensures the safe receipt, handling, storage, and issue of HM.
- (f) Ensures that MSDSs are readily available and issued with HM to assure proper handling and emergency response preparedness.
- (g) Ensures processing of unit or activity turn-ins is timely in order to maximize the potential for transfer and/or reutilization of HM prior to shelf-life expiration.
- (h) Provides necessary logistics data is provided to the garrison/depot staff to support environmental HMMP (eHMMP) reporting requirements.
- (i) Conducts planned and unscheduled HMMP assessments of the HMMP, to include site inspections and assistance visits.
 - (3) The chief, DPWL-ED-
 - (a) Provides HS environmental input to the garrison commander and HMMP committee.
- (b) Coordinates with the D-DPWL to ensure that environmental requirements are integrated into the garrison HMMP program.
- (c) Recommends eHMMP goals and objectives, consistent with higher headquarters guidance, and conducts annual pollution prevention assessments to identify opportunities for enhancing pollution prevention efforts and to measure goal achievement.
- (d) Administers the "Fort Someplace" HM management information tracking system and collects data to meet compliance and management reporting requirements.
- (e) Provides environmental staff oversight, guidance, and inspection of "Fort Someplace" operations and tenant activities, sometimes in conjunction with the safety and/or external offices.
 - (f) Identifies potential nonhazardous product substitution.
 - (g) Serves on the HMMP committee as a voting member.
 - (h) Coordinates with the D-DPWL and the safety and industrial hygiene offices to-
 - 1. Identify processes that use HM, generate HW, or result in unsafe conditions for personnel on "Fort Someplace."
 - 2. Identify HM, authorized users, and levels of storage per location.
 - 3. Pre-authorize HM prior to first-time ordering.
 - 4. Maintain and process updates of MSDS data.
 - (i) Provides MSDS information to the fire department.
 - (j) Reviews and approves AUL changes requests, in coordination with the safety office.
- (k) Establishes and operates an HW management office to provide collection, disposal, and recycling of HM and wastes.
 - (1) Prepares ad hoc HS management reports, as required.
 - (m) Determines and tracks necessary HS training for garrison personnel.
 - (4) The "Fort Someplace" safety officer—
 - (a) Provides safety input to the garrison commander and HMMP committee.
 - (b) Serves on the HMMP committee as a voting member.
 - (c) Conducts safety and occupational health planning for "Fort Someplace".
 - (d) Coordinates with the environmental division to establish policy and procedures to—
 - 1. Identify HM and authorized users.
 - 2. Pre-authorize HM prior to first-time ordering.
 - 3. Maintain and keep updates on MSDS data.
 - 4. Provide MSDS information to the fire department.
- (e) Conducts safety and occupational health assessments to identify opportunities for enhancing safety efforts and reducing risks to "Fort Someplace" personnel.
 - (f) Participates in AUL change approvals.
- (g) Includes identification of HM not in the HMMA database during activity assistance visits and reports these items to the chief, HMCP, for appropriate action.
 - (h) Conducts hazard communication training for "Fort Someplace" personnel.
 - (5) The D-DPWL-operations and maintenance division—
- (a) Establishes procedures to implement "Fort Someplace" HMMP policy within the operations and maintenance division.

- (b) Serves as a voting member of the "Fort Someplace" HMMP committee.
- (6) The "Fort Someplace" health clinic logistics division supply officer—
- (a) Follows The Surgeon General guidance and establishes an HMCP.
- (b) Publishes an SOP for HMCP operations and customer support.
- (c) Enters HM procurements and usage into the HMMA as they occur or at least weekly.
- (7) TheDOIM—
- (a) Ensures adequate networking to support efficient HMMA transactions between server and clients, if required.
- (b) Provides necessary Internet Protocol addresses and network access to support HMMA operations.
- (c) Maintains HMMA hardware, including required maintenance contracts.
- (d) Provides necessary software to maintain the HMMP.
- (e) Installs HM management and related software and hardware upgrades, as required.
- (f) Participates and votes as a member of the "Fort Someplace" HMMP committee.
- (8) The HMMP committee—
- (a) Is responsible for the integrated efforts necessary to successfully implement HM management software and support enhanced HMMP business practices on the garrison.
- (b) Develops the implementation plan for HMMP, assigns roles and responsibilities, identifies and assigns actions with necessary milestones, and ensures milestones are satisfactorily completed.
 - (c) Serves as implementation workgroup for HMMP.
 - (d) Provides oversight to HMMP operations.
 - (e) Conducts periodic in-progress review briefings on the status of HMMP implementation and ongoing operations.
 - (f) Is chaired by the garrison commander.
- (g) Includes representation from all tenant activities, DPWL-base operations supply, DPWL- base operations maintenance, the safety office, and the DOIM. The garrison commander or EQCC adjusts membership, as required.
 - (9) The HMMA database manager (ADBM) in the environmental office—
 - (a) Establishes HMMA access rights as directed by HMMP committee.
 - (b) Conducts day-to-day maintenance of HMMA database and conducts periodic update of tables, as required.
 - (c) Ensures the daily backup of HM management transaction data.
 - (d) Responds to garrison HM management software functional questions.
 - (e) Coordinates HM management software updates with appropriate offices and the software provider.
 - (f) Receives and tracks "Fort Someplace" HM management software engineering change proposals.
 - (g) Assists the chief, DPWL-ED in preparing reports using HM management software data, as required.
 - (h) Supports HMCP and HW manager in correcting data.
- (i) Assists the DOIM in identifying and correcting network problems related to HM management software, as required.
 - (10) The HMCP, DPWL-supply division—
 - (a) Establishes policy on the acquisition and storage of HM, in accordance with "Fort Someplace" policy.
- (b) Manages HM as an integral part of the supply mission; maintains an HM inventory consistent with standard Army procedures; and provides a sole source of HM to "Fort Someplace" activities.
 - (c) Establishes and publishes operating hours consistent with customer requirements.
 - (d) Publishes customer procedures for HM transactions.
- (e) Establish a requisitioning objective and reorder point for each HM required to be stocked and uses "just-in-time" requisitioning to the extent possible, using Defense Supply System and local purchase procedures.
 - (f) Establishes procedures for meeting emergency HM requirements.
 - (g) Establishes an HM re-use capability.
- (h) Ensures that HMCP personnel receive HS handling and management training, including HMMA transaction training.
- (i) Ensures that MSDSs are maintained for all requisitioned and stored HM and that MSDSs accompany received HM.
 - (j) Documents all HM transactions using the HMMA.
 - (k) Issues requested HM within 2 hours of request or HM receipt from source of supply.
 - (1) Receives empty HM containers from customers and records HM usage in the HMMA.
 - (m) Participates in the "Fort Someplace" HMMP committee.
- (n) Ensures that spill plans are prepared, available for emergency response, and reviewed and updated at least annually.
 - (o) Ensures that appropriate spill response materials are on hand.
 - (11) The director of the fire department—
 - (a) Participates and votes as a member of the "Fort Someplace" HMMP committee.

- (b) Provides policy and guidance on all fire related issues as they pertain to HM and HW.
- (12) The director of contracting—
- (a) Sets up contract mechanisms with local vendors to meet customer requirements for local purchase items. Delivery will be to the HMCP, DPWL-supply division, who will then issue the procured hazardous material to the garrison customer using the HMMA.
 - (b) Participates and votes as a member of the "Fort Someplace" HMMP committee.
 - (c) Provides guidance controlling the use of GPCs for HM procurement.
- (d) Ensures that all service, maintenance, and construction contracts include statements that facilitate full support of the installation HMMP.
 - (e) Reports to the garrison commander and HMCP the purchase of unauthorized HM by GPC holders.
 - (13) "Fort Someplace" activity chiefs and tenants—
- (a) Ensure that all processes, HM, and waste streams have been approved and incorporated into the HMMP AUL to allow expeditious HM transactions.
 - (b) Ensure the establishment of 2-week shop/lab supply levels for HM normally used in day-to-day business.
- (c) Ensure that HM in excess of the 2-week stockage level or in excess of known immediate needs is returned to the HMCP. This includes open or closed containers of useable materials.
 - (d) Obtain all HM from the appropriate HMCP.
- (e) Return empty containers or report actual HM usage to the HMCP as coordinated between the HMCP and the customer.
 - (f) Ensure that work areas and laboratories maintain correct manufacturer MSDSs for each HM used and/or stored.
 - (g) Designate personnel authorized to request, receive and store HM.
 - (h) Obtain and mark appropriate containers for collecting used HM.
 - (i) Coordinate the turn-in of unserviceable HM with the HW office.
 - (j) Designate personnel authorized to coordinate and turn-in HW.
- (k) Ensure that all personnel exposed to HS in the course of their work receive proper training and ensure that proper and adequate PPE is stocked, maintained, and issued to personnel.
 - (1) Coordinate environmental and safety training with the DPWL-ED and respective safety offices.
 - (m) Ensure that all personnel are made aware of and comply with this program.
 - (n) Provide representation to the "Fort Someplace" HMMP committee
- (o) Inspect work areas to ensure that HM have been recorded in the HMMA; that HM is properly rotated and stored; and that used HM is properly marked, in accordance with "Fort Someplace" and activity guidance.
- (p) Ensure that spill plans are prepared, approved, and available for emergency response and are reviewed and updated at least annually.
- (q) Ensure that HS spill response is immediate and in accordance with the site spill response plan. Notify the DPWL-ED, fire department, and safety office when appropriate.
 - (r) Ensure that appropriate spill response materials are on hand.
 - (14) Individual military and civilian personnel handling and using HS-
 - (a) Seek appropriate training when tasks include handling of HS.
- (b) Ensure MSDSs are on hand (electronic or hard copy) for all HM used or on hand. Be familiar with potential hazards associated with each HM used or on hand.
- (c) Wear appropriate PPE when handling HS. Refer to the MSDSs, product labels, technical manuals, and/or the garrison safety office for guidance. Individuals should also ensure that PPE is maintained in accordance with applicable technical documents.
 - (d) Handle HM in accordance with MSDS and product labels.
 - (e) Store HM in accordance with Army and "Fort Someplace" guidance and approved procedures.
 - (f) Place used HM in properly marked containers.
- (g) Notify supervisors and section chiefs (when appropriate) when new processes or materials are required and/or when new waste streams will be generated.
- (h) Contain and clean up all spills immediately and report the spill to supervisors. For spills too large or those that pose a safety or health threat to personnel or the environment, immediately notify the fire department and the DPWL-ED. Consult individual activity spill plans for more details.
 - g. AUL (HM, processes, and algorithms).
- (1) AUL definition. The AUL is the listing of processes and materials approved for use within "Fort Someplace" activities and tenants. The AUL is the composite of the HMMA table information that links processes using HM and/or generating HW, authorized HM, anticipated waste streams, and algorithms to estimate releases. An HMMA AUL record is created when an HMMA master inventory record is approved for use or storage on the garrison and is linked to a site-specific process record. Each authorization includes a review and approval of all aspects of a process, the HM

used, the process using the HM, the resulting waste stream(s) and emissions, and the work center(s) involved. Figure C-1 illustrates the relationship. The AUL supports the Department of the Army and "Fort Someplace" HMMP policy and can be used for Organization for International Standardization (ISO) 14000 efforts.

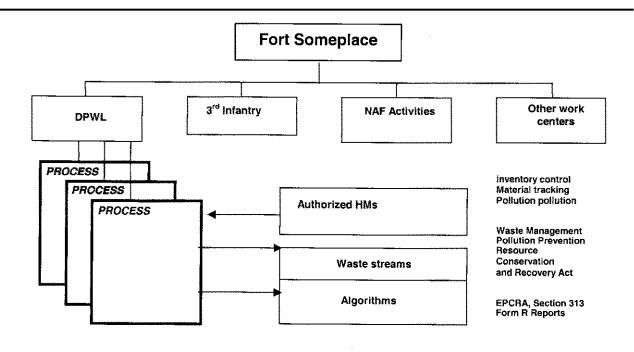


Figure C-1. HMMP processes and algorithms

- (2) AUL use.
- (a) The AUL is used to control HM acquisition, to identify types of HM usage, to estimate HW generation, to prepare environmental reporting and as a pollution prevention tool. Each requisition, receipt, and issue transaction is validated against the AUL prior to completion. Transaction exceptions to the AUL will be reported to the D–DPWL for appropriate action. The HMMA automatically validates each issue transaction against established authorizations prior to issue. Unauthorized requests cause a system warning, which must be overridden by the HMCP operator. Overriding the warning requires approval from the DPWL–ED. Overriding AUL and shelf-life expiration message during material transactions creates exception reports. Work area supervisors, the DPWL–ED, and the safety office review exception reports weekly and take actions necessary to correct the cause for the current exception and those actions needed to preclude a reoccurrence.
- (b) Each distinct operation—such as painting, use of a recirculating solvent parts washer, performing a medical procedure, or conducting research protocols—constitutes a process in the HMMA. Processes may be activity specific but are generally not location specific. Processes generate waste.
- (c) HW characterization records describe the waste and waste container. HW characterizations can be referenced using unique names, locally assigned codes, or contract line numbers. An algorithm for each approved process is created and entered into the HMMA. Algorithms predict the fate of materials used in a process and use this information to collect information for the EPCRA Form R Report and for pollution prevention opportunity assessments. The DPWL-ED establishes HMMA process algorithms.
- (3) Maintaining the AUL. All supervisors are responsible for ensuring that the HMMA database accurately reflects approved processes, HM used, and HW generated. AUL change requests are conducted through the DPWL-ED. Changes to HM usage are processed in advance of HM procurement to ensure efficient flow of HM through the HMCP.
 - h. Pollution prevention opportunity assessments and reporting.
- (1) HMMP inspection points will be added to the command logistics inspection criteria by the D-DPWL. Inspections and assistance visits of the HMCP to verify that HMMP policy and guidance have been implemented and are being followed will be conducted on a scheduled and unscheduled basis. Inspection results will be provided to the

supply division supervisor for corrective action. A copy of the report identifying shortcomings, opportunities for improvement, and recommended solutions is forwarded to the HMMP committee for review and appropriate action.

- (2) The DPWL-ED conducts annual pollution prevention opportunity assessments, which identify the potential for reduced HM acquisition through changes to processes or material substitution. They also assist in identifying opportunities to reduce HW generation through material substitution or process change. The HMMA provides sufficient HW, HM, and chemical inventory and use information to support assessments. The HMMA also provides the capability to automate EPCRA reporting and biannual HW reporting. The centralized database provides opportunities for ad hoc management reporting. "Fort Someplace" activities are encouraged to take advantage of this management tool. Requests are made through the DPWL-ED. Inspection reports are provided to operational managers and to the HMMP committee for appropriate action.
- (3) The safety office will add HMMP criteria to annual and periodic inspections and assistance visits. Criteria will include identification of on-hand HM that is not approved for a process, processes with no associated and approved material, lack of required or maintained PPE, and the status of training for hazardous material use. Reports will be provided to operational managers and to the HMMP committee for appropriate action.
 - i. Expected HMMP benefits. The "Fort Someplace" HMMP—
- (1) Helps the garrison commander protect human health and the environment through enhanced compliance with existing laws and regulations. This further supports sustainability objectives.
- (2) Can generate savings through reduction of usage, elimination of duplicate tracking and information systems, control of ozone depleting substance (ODS) waiver allocations, and support of the new tasks imposed on all garrisons by EO 13423.
- (3) Contributes to safe handling of ODS and HM and reduces the potential for Notices of Violations and the monetary fines associated with them.
- (4) Eliminates duplicative HM tracking and reporting functions and provides data showing the status and location of HM to all base organizations requiring that information.
- (5) Can realize cost savings in both the procurement of hazardous materials and the disposal of hazardous and solid wastes.
- (6) Addresses inherent problems with shelf-life expiration dates, environmental and occupational health and safety risks, safe storage requirements, security, disposal and liability costs, and tracking and reporting requirements.
- (7) Can realize significant cost savings from reducing the amounts of HM. Garrisons with programs similar to the "Fort Someplace" HMMP have found 3 to 6 years of HM in stock. The shelf life often expires before anyone uses it. A major Air Force command using a program similar to the "Fort Someplace" HMMP estimated that 11 percent of its HW was actually unused HM, and that they could have reused over 60 percent of it. This would have amounted to an annual cost saving for each garrison of up to \$70,000 in disposal costs alone. Savings on this order are readily attainable under the "Fort Someplace" HMMP.

Appendix D Sample Hazardous Material Management Internal Standard Operating Procedures

D-1. General

This sample directorate of installation support (DIS) HMCP internal SOP document is written in compliance with the garrison HMMP policy. The objective of the "Fort Someplace" HMMP is to control and gain visibility of HM entering "Fort Someplace," being stored and used on the garrison, and/or resulting in HW generation. Centralized HM management and control reduces acquisition costs, supports sustainability, reduces waste generation, reduces risk to personnel, and facilitates enhanced regulatory compliance. The DIS Supply Division has been designated as the "Fort Someplace" HMCP and the chief of the HMCP serves as the HM manager for all "Fort Someplace" garrison activities, tenants, and contractors. "Fort Someplace" has implemented an HMMA to support HMCP HM tracking operations.

D-2. Purpose

The purpose is to prescribe standard operating procedures to be followed by "Fort Someplace" DIS-supply division HMCP.

- a. The supply division complies with the following established general garrison procedures:
- (1) Processes and HM are reviewed and approved by the garrison HMMP committee (see the environmental and safety offices for further assistance). Approvals are recorded in the garrison AUL and viewable in the HMMA.
- (2) The HMCP is responsible for validating HM against the AUL and centrally ordering, receiving, and issuing all garrison HM.
- (3) The HMCP establishes a re-use capability to facilitate turn-in of unneeded serviceable HM and re-issue on a free basis.
 - (4) Garrison activities and tenant work areas maintain the minimal amount of HM needed for day-to-day operations.

- (5) Work area HM supplies are replenished through the HMCP.
- (6) Empty containers and unneeded HM is turned in to the HMCP. Serviceable unneeded HM is free-issued to other "Fort Someplace" activities.
 - (7) Customers report actual HM usage to the HMCP, as containers are turned in.
 - (8) The HMCP records all HM transactions in the HMMA.
 - b. Figure D-1 provides an overview flow diagram of the HMMP operational concept.

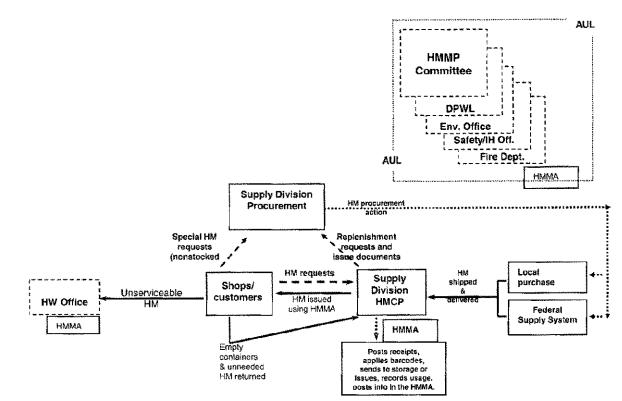


Figure D-1. "Fort Someplace" DIS HMMP operational concept

D-3. Responsibilities

- a. The chief, DIS-supply division-
- (1) Participates in the garrison HMMP committee as a voting member.
- (2) Ensures that HMMP business practices are fully incorporated into logistics operations.
- (3) Ensures that an internal and external DIS-supply division HMMP SOP is developed and distributed.
- (4) Ensures that all supply division personnel are familiar with the garrison HMMP policy and this SOP.
- b. The chief, DIS-supply operations branch—
- (1) Establishes and publishes scheduled operating hours to receive HM from sources of supply and support garrison customers.
 - (2) Assigns HMMP POC responsibilities in writing to one primary and three secondary individuals.
 - (3) Ensures that supply operations personnel are familiar with supply division internal and external HMMP SOP.
 - (4) Distributes the external HMMP SOP to customers.
 - (5) Appoints supply operations personnel to conduct HMMA transactions.
 - (6) Ensures that HMMA operators are trained.
 - (7) Ensures that all HM handlers receive appropriate hazard training.
 - (8) Ensures that all HM handlers receive necessary PPE and are trained in its use.
 - c. Supply operations (HMCP) supervisors and operators—
 - (1) Should be familiar with and implement HMMP policy.

- (2) Implement HMMP procedures
- (3) Establish a HM re-use capability to reissue previously issued and returned serviceable HM. Reissues will be free of charges.
 - (4) Are trained to conduct transactions in the HMMA.
 - (5) Are familiar with hazards associated with HM in and around their workplace.
 - (6) Are familiar with spill response procedures and requirements.
 - (7) Should seek out required hazard training and PPE.

D-4. Internal hazardous procedures

- a. Internal approving, requesting and procuring procedures.
- (1) Approving an HM (table D-1).
- (a) The HMMP committee is responsible for maintaining the garrison AUL. The supply division manages approved HM. The committee coordinates with the supply division to determine which materials will be stored and which will be procured on demand. Every effort is made to reduce garrison storage consistent with readiness requirements. The decision to store a particular HM includes a decision to make it an ASL item or a nonstocked item based on demand and committee decision. A requisitioning objective and reorder point and possible storage/use limits are also decided upon. The committee provides approval information to the supply division HMMP POC. The supply division POC ensures that approved items are added to the ASL under the appropriate category and also recorded in the HMMA. All HM on the ASL should also be recorded in the HMMA as an approved item.
- (b) The supply division will request approval of items in storage or received that are new and determined to be hazardous. The HMMP POC provides item identification information and a copy of the manufacturer's MSDS to the environmental office, which coordinates with the committee for approval. The environmental office can provide emergency approvals, but notifies the committee of all items it approves. If the item is being requested by a customer, the customer is responsible for obtaining approval from the committee or environmental office using the AUL authorization request available on the HMMA.
- (c) Requests for HM that are not on the AUL will be rejected and sent back to requestor with explanation, requiring the requestor to obtain HM approval.

Table D-1 HM authorizations/additions	
Action	Who
Printing an AUL authorization request from the HMMA	Any supply division HMMA operator, environmental office, safety office, or fire department
Verify Item is on AUL	Any supply division HMMA operator, environmental office, safety office, or fire department
Add a new HM to the HMMP database. Includes researching existing NSNs and assigning Management Control Number (local stock number), as required	Using activity researches MSDS and material information and enters in authorization request. NSN/ management control number is researched and assigned in database by HMCP POC. Actual data entry is conducted by HMCP POC or ADBM.
Add a new MSDS to the HMMP database	Supply operations HMMP POC, environmental office or safety office.
Link an item (NSN/ management control number) to an MSDS for the purpose of recording an approval	Supply operations HMMP POC or environmental office

- (2) Requisitioning and procuring procedures (table D-2).
- (a) Item managers and purchasing agents conduct acquisition of approved HM based on a customer request or a stock replenishment action. Prior to procurement, an item manager or purchasing agent coordinates with the supply division HMMP POC to verify that the HM is on the AUL. If the item is not on the AUL, procurement is put on hold until the item is approved.
- (b) Customer requests for unauthorized HM will be rejected. Customers will be notified of the reason for rejection and provided assistance in obtaining authorization.
 - (c) Before procuring or requisitioning the HM—
- 1. Determine whether HM request will be satisfied from local purchase, federal supply system or from other "Fort Someplace" activity. The garrison objective is to provide requested HM within 36 hours of the request (4 hours for urgent requests).
- 2. Identify other "Fort Someplace" source. For urgent requirements, search for alternative sources on FT Someplace to determine if the requirement can be met from other or non-DIS resources. Using the HMMA, return the HM to

storage from the owning activity and then follow Issue procedures. Material can be transferred directly between the two sites if they have the same Department of Defense activity address code.

- 3. Order from Federal Supply System. Process the request using standard Army logistics automation procedures. Direct shipment to the central receiving point (CRP). Create an HMMA due-in for the HM (optional).
- 4. If a HM is purchased locally, the purchasing agent will request a copy of the MSDS from the vendor or manufacturer. If the vendor or manufacturer cannot provide an MSDS, a decision must be made as to whether or not to complete the transaction. If the HM is procured without an MSDS, the purchasing agent is responsible for obtaining an MSDS via HMIRS, the internet, or other authorized method. The environmental office can provide assistance.
- (d) Item managers and purchasing agents direct HM to be shipped to the supply operations CRP. Locally procured items are hand carried to the CRP to be recorded in the HMMA.
- (e) Special arrangements can be made to allow customers to locally procure HM. In these instances, prior arrangements to record the receipt in the HMMA must be made by the supply division HMMP POC. The customer, the supply operations branch, and the HMMP committee must be fully familiar with this arrangement.

Table D-2 Requests for HM	
Action	Who
Verify that a HM is approved	Supply division HMMP POC, any HMMA operator, environmental office, safety office, fire department
Verify that an MSDS is in the HMMP database	Supply division HMMP POC, any HMMA operator, environmental office, safety office, fire department
Identify activities that have a particular product	Supply division HMMP POC or any HMMA operator
Create a HM due-in from vendor or manufacturer	Supply division HMMA operator

- b. Internal HM receiving procedures (table D-3).
- (1) All HM is delivered directly to the supply division CRP from the source of supply.
- (2) HM is received in accordance with standard Army logistics automation procedures. Supply and vendor documentation is provided to purchasing agents or item managers, who record receipts in the logistics automation system or GPC accounting system.
 - (3) The receiver then posts the receipt in the HMMA and ensures that the following information is recorded:
 - (a) Document number.
 - (b) MSDS number.
 - (c) Manufacturer.
 - (d) NSN.
 - (e) Part number.
 - (f) Manufacturer lot/batch (if available).
 - (g) Expiration date.
 - (h) Price.
 - (i) Quantity received.
 - (i) Who is receiving.
 - (k) Storage location (all material received on the garrison requires a storage location, even if temporary).
- (4) When the stock number is not in the HMMA database, notify the supply division HMMP POC or environmental department immediately. The supply division HMMP POC will assist in identifying a correct stock number and entering it in the HMMA database. Pending receipt and loading of a correct stock number and item approval, the HM is placed in temporary storage and conspicuously marked until barcodes can be prepared (see approval steps above).
- (5) When the correct MSDS is not in HMMA, coordinate with vendor/manufacturer to obtain the correct MSDS. Provide the MSDS information to the supply division HMMP POC or environmental department for entry into the HMMA. Pending receipt of the MSDS and item approval, the HM is temporarily stored and conspicuously marked as awaiting MSDS (see approval steps above).
- (6) If the received HM is going to storage for future issue, the material is validated against the AUL, a barcode is printed and applied, and the HM is forwarded to the appropriate storage location. If the received HM is being immediately issued or placed in the customer pickup bin, it is validated against the AUL and received and a barcode is printed during the issue transaction.

- (7) Each storage location has two subsections, and material in each of these locations is further stored by shelf-life, with oldest material placed in front:
 - (a) Virgin material on the Standard Army logistics application accountable record and on the HMMA inventory.
 - (b) Reuse material on the HMMA inventory, but not on the Standard Army logistics application accountable record.
- (8) Some bulk items (materials brought in by truck and placed in tanks) will be shipped to the using shop with documentation provided to the purchasing agents. Bulk items are not bar-coded. Examples of bulk HM items are fuel oil and steam plant chemicals. Purchasing agents are responsible for ensuring that receipt information is captured in the HMMA.
 - (9) If HM expiration date has passed—
 - (a) Request guidance from supervisor.
 - (b) Ask customer if the item is still acceptable:
 - 1. If yes, update expiration date.
 - 2. If no, return to vendor, find alternate use/customer, or, as a last resort dispose through waste procedures.
- (10) Store all HM by shelf life to facilitate the issue of oldest material first. Oldest HM is stored in front of newer material and issued first. HM with fewer than 60 days remaining shelf life is reported to the supply operations branch supervisor for disposition guidance or appropriate shelf-life extension.

Table D-3 HM receipt actions	
Action	Who
Record HM receipt	Supply operations HMMA operators
Update expiration date	Supply division HMMP POC

- c. Internal HM issue procedures (table D-4).
- (1) Issue oldest material first, beginning with re-use material.
- (2) Using the HMMA issue screen, conduct a HM transaction. The HMMA will automatically validate the AUL, high- and low-quantity limits, training requirements, and PPE requirements and status.
 - (3) Ensure that the HM has an HMMA barcode attached before issuing.
- (4) Print a hardcopy receipt of the issue and attach to the Standard Army logistics application material release document.
- (5) Prepare and disseminate a bimonthly outstanding material report for each customer. This report is generated by the HMMA and lists all HM issues older than 60 days whose disposition has not been reported back to the HMMO. Customers will annotate the report and return it to the HMCP. The HMCP uses this report to update the HMMA inventory.

Table D-4 HM issue procedures	
Action	Who
Issue HM	Supply division HMMA operators
Prepare outstanding material report	Supply division HMMP POC

- d. Internal HM return and disposition procedures (table D-5).
- (1) Customers return unneeded serviceable HM to the HMCP for storage and re-issue on a free basis.
- (2) Actual usage, loss, spills, or transfer to waste is reported by customers to the HMCP by barcode serial number. The HMCP records the information in the HMMA, ensuring that the material classification is changed from "virgin" to "reuse." Accurately completing this step directly affects environmental compliance reporting.
 - (3) Place returned material in the appropriate storage location.
- (4) If a HM in storage expires, cannot be renewed, and cannot be used for alternative processes within 6 months, contact the HW office to coordinate containerization and transfer to waste procedures. Ensure that the HM is subtracted from the HM inventory and added to the HW inventory.
- (5) Customers return empty HM containers to the HMCP when the material is consumed. The HMCP notes the barcode information on empty containers, finds the issue record in the HMMA, and posts actual usage data. This provides accurate inventory and emergency planning and response information. The HMMA automatically updates inventory and toxic release inventory files.

Table D-5 HM disposition procedures	
Action	Who
Record disposition of HM (use, return, loss, spill)	Supply division HMMA operators
Transfer HM to waste (coordinated with HW office)	Supply division HMMA operators, HW office, HMMA operators

e. Offsite transfers of HM. When directed to ship HM offsite, subtract the HM from the HMMA HM inventory. This directly affects environmental compliance reporting. The supply division HMMA operators prepare documents to transfer HM offsite.

Appendix E Sample External Hazardous Material Control Point Standard Operating Procedure

E-1. Operational procedures

- a. General. This DIS HMMP external SOP document is written in compliance with the garrison HMMP policy. The objective of the "Fort Someplace" HMMP is to enhance mission readiness and sustainability through control and visibility of HM entering "Fort Someplace," stored and used on the garrison, and/or resulting in HW generation. Effective pollution prevention programs require the partnership of HM users, providers, and technical experts. The DIS provides oversight of the garrison HMMP, with assistance from the environmental, safety, and IH offices. The DIS supply division has been designated as the "Fort Someplace" HMCP and serves as the HM manager for all "Fort Someplace" garrison activities, tenants, and contractors. All units, activities, and tenants will minimize the amounts of HM stored and used and obtain HM replenishment through the HMCP. Contractor-provided HM is tracked by the HMCP. Recommended changes to this SOP are welcomed. Provide proposed changes in writing to the DIS HMCP identifying the proposed changed, resulting benefits, submitting activity, point of contact name, and telephone number.
- b. Purpose. The purpose is to prescribe standard operating procedures to be followed by "Fort Someplace" units, activities, tenants, and contractors for the management of HM, in compliance with the garrison HMMP.
 - c. Responsibilities of garrison units, activities, and tenants.
- (1) Identify and approve HM requirements, based on approved technical processes, work orders, service orders or for overhead stocks.
 - (2) Ensure that processes, HM, and generated wastes are recorded in the garrison AUL.
 - (3) Ensure that approved HM (listed on the AUL) are also listed on the ASL.
- (4) Maintain the minimal amount of HM needed to support day-to-day operations for 1 month or for a job/protocol with specific material requirements.
 - (5) Replenish all HM through the HMCP or in coordination with the HMCP.
 - (6) Submit the names of personnel authorized to order, pick up, and/or turn in HM to the HMCP.
 - (7) Confirm that—
 - (a) Desired HM is authorized.
 - (b) Personnel have adequate training to handle and use HM.
 - (c) MSDSs are on hand.
 - (d) Adequate PPE has been issued, before requesting HM.
 - (8) Return unneeded serviceable HM to the HMCP for storage and re-issue.
 - (9) Report actual HM usage, loss, spill, or transfer to waste to the HMCP.
- (10) Ensure that contracts include the requirement to obtain approval of intended HM usage, actual HM usage, and HW generation to the environmental division.
- d. External HM procedures. To comply with regulatory guidance and reduce acquisition and storage costs and the potential environmental and health risks to personnel and patients, the following HM management procedures are established. Requests for approved HM are submitted to the HMCP by the requesting organization. Issues are recorded in Standard Army logistics application and the HMMA. The HMMA validates requests against authorizations (AUL), records necessary process information, and maintains necessary material and chemical inventory information until HM is actually consumed or becomes a waste. Organizations should use issued HM in approved processes. Unneeded serviceable HM is returned to the HMCP. Serviceable HM is made available for re-issue on a free basis, in accordance with the AUL. Organizations will handle unserviceable HM as hazardous waste. Organizations report actual usage to the HMCP. The HMCP posts actual usage and waste information in the HMMA. Empty HM containers are returned to the HMCP or garrison HW office, where the issue record is closed and actual HM usage is recorded. Figure E–1 illustrates the HM issue and return flow.

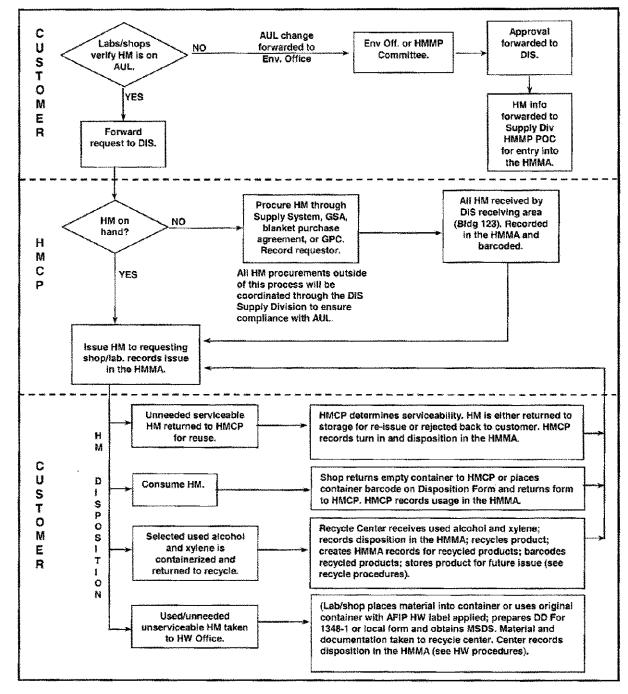


Figure E-1. HM issue and return flow

- (1) Organization requesting HM procedures.
- (a) Identify those personnel authorized to order, pick up, and/or turn in material. Signature cards approved by commanders are provided to the HMCP before an individual will be issued HM.
- (b) Establish maximum HM stocks to conduct day-to-day operations for a 1-month period (overhead). Prepare and post a listing of these materials in shop offices. DIS shops will list required HM on approved overhead job orders.
- (c) Check to determine if the HM is on the AUL. If not, see procedures in paragraph E-2 for making changes to the AUL.

- (d) Ensure that personnel have received necessary hazard training and PPE before HM is requested. Contact the safety and environmental offices to determine training and PPE requirements.
- (e) Request HM from the DIS supply division supply operations branch (HMCP). DIS shop requestors must have approved work order or standard operating order to order HM.
 - (f) Order bulk materials using current approved business practices.
 - (2) HM pick-up and issue procedures.
 - (a) Ensure that personnel authorized to pick up material from the HMCP have been reported to the supply division.
- (b) Ensure that pick-up vehicles meet Department of Transportation and other safety requirements commensurate for the HM being picked up.
- (c) Ensure that personnel picking up HM are properly trained for any hazards associated with the material and that training has been recorded in the HMMP database.
- (d) Coordinate with the DIS environmental office to correct deficiencies noted in the HMMA AUL and issue exception reports.
 - (e) Ensure that all issued HM has an HMMA barcode affixed. If not, report it to the HMCP for corrective action.
 - (3) HM receipt procedures.
- (a) Receive and store materials from the HMCP safely in accordance with Army policies. HM will be consolidated to the extent possible, keeping in mind compatibility of materials.
- (b) Storage areas will be clearly marked with necessary hazard labels. Contact the safety office with any HM safety questions. HM must have the HMMA barcode affixed.
- (c) Obtain and maintain the appropriate and current manufacturer's MSDS for each HM product stored or used. MSDSs are maintained alphabetically in 3-ring binders. Binders are kept in a highly visible location and readily accessible. All employees will be briefed on the location of MSDSs. MSDSs are updated annually or more frequently, as required.
- (d) Order bulk materials using current approved business practices. Upon delivery of bulk HM, submit documentation to DIS supply operations branch. The following information is required:
 - 1. Shop code.
 - 2. Work order number.
 - 3. Product purpose (industrial process such as water treatment, boiler, generator plant chemicals, and so on).
 - 4. Quantity of HM ordered and received.
- 5. Description of HM received (size of container (if applicable), manufacturer, and nomenclature. If the item is new, complete the authorization request and provide a copy of the MSDS.
 - (e) Use HM in accordance with approved shop operational and safety procedures.

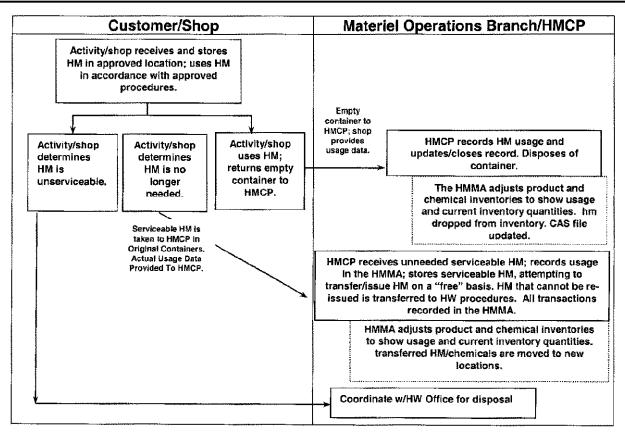


Figure E-2. HM return and disposition procedures

- (4) HM return and disposition procedures (fig E-2).
- (a) Make every effort to use on-hand HM for its intended use prior to shelf-life expiration.
- (b) Quantify serviceable HM in excess of the 1-month operating level or other known immediate needs and return serviceable excesses to the HMCP. Notify the HMCP in advance of large quantities or large containers to be turned in. Dispose of unserviceable HM using garrison HW procedures.
- (c) Identify on-hand serviceable HM that will expire within 90 days and without anticipated use within the immediate future. Report this HM monthly to the DIS supply division for disposition instructions. Transfer serviceable HM to HMCP or other activity as directed by DIS supply division.
- (d) Return empty HM containers to the HMCP. The HMCP may implement a reporting procedure to preclude double handling of empty containers.
 - (e) Report actual usage to the HMCP, including spilled and/or lost quantities
- (f) Return all unserviceable HM to the DIS HW office, as soon as the HM is determined to be unserviceable. A copy of the manufacturer's MSDS must accompany container.
- (g) Review bimonthly outstanding material reports provided by the HMCP and annotate the report to provide updated status. Return the annotated report to the HMCP within 5 workdays of receipt. Outstanding material reports list all HM issues older than 60 days whose disposition has not been reported back to the HMCP.

E-2. Procedures for changing, updating, or deleting AUL records

a. General. Commanders and supervisors/section chiefs/team leaders should identify a need for a material not currently approved for a process identified and recorded in the HMMA. New jobs or procedures are reviewed against the HMMA AUL to ensure that the processes, materials, and waste streams have been approved for "Fort Someplace." Approval of a new process requires establishing appropriate algorithms to estimate process releases. To avoid unnecessary delays, the following procedures will be followed to add a new HM, process, waste stream, and/or algorithm. The garrison environmental office can provide emergency approvals. Emergency requests can be conducted telephonically with hard copy backup within 1 workday. The HMMA provides screens containing data fields that must

be completed, changed, or deleted. Figure E-3 illustrates the flow for adding a new or changing an existing HM and/or process.

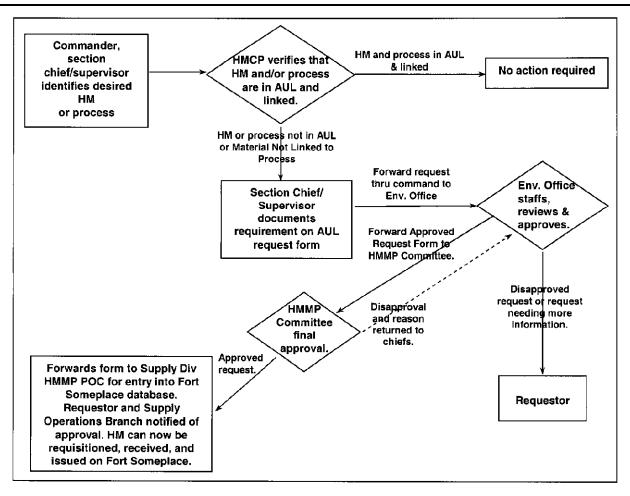


Figure E-3. Additions, deletions or changes to an AUL

- b. Change procedures.
- (1) Coordinate with the HMCP or environmental office to verify that material and/or process is not already recorded in the HMMA (may be under a different name or stock number).
- (2) Coordinate with the HMCP and environmental office to identify acceptable non- or less hazardous/toxic substitutes (if practical).
- (3) Complete a locally developed HM authorization request, making every effort to describe fully the process the HM will be used in, the HM product desired, and resulting waste streams. The request is completed and approved at the facility maintenance and utility operations chief level.
 - (4) Forward completed requests through onsite command chain to the environmental office for review and approval.
 - (5) Commanders and supervisors will—
 - (a) Receive request from requestor.
- (b) Coordinate with "Fort Someplace" environmental and safety offices and the supply operations branch to approve or disapprove based on mission, cost, supply availability, and environmental and safety considerations; to assist in identifying acceptable substitutes (requests will be completed within 24 hours); and to provide for emergency telephonic requests, as required.
- (c) Maintain a log of all AUL requests. Log will serialize requests and track requested item, requestor, date of request, date received, approval results, and date requestor notified.

- (d) Forward approved requests to the "Fort Someplace" environmental office within 8 hours of approval for final review, approval, and entry into the HMMA.
- (e) Return disapproved requests to the requestor within 8 hours of action, with explanations for disapproval and recommendations.
- (f) Verify that approvals are correctly entered into the HMMA database and coordinate with the supply division HMMP POC to implement necessary corrections.
 - (6) "Fort Someplace" environmental office personnel will—
 - (a) Receive request from commanders and supervisors.
- (b) Review for known restraints/constraints that would preclude the HM or process from being used on "Fort Someplace." Identify new training, personal protection, or facility enhancements required to use new HM or process. Review is completed within 1 workday. Inform submitters of known substitutes that will reduce toxic emissions or risk to "Fort Someplace" personnel and environment.
 - (c) Staff the request with the safety, industrial hygiene, environmental, and fire department offices.
- (d) Develop algorithms for approved or changed processes and document them on the an authorization request. Ensure that waste streams are identified and documented on an authorization request. Assist in developing waste stream information.
- (e) Maintain a log of all AUL requests. The log will serialize requests and track requested processes and items; and identify the requestor, date of request, date received, approval results and date the requestor was notified of approval results.
 - (f) Forward approved requests to the FT Someplace supply division HMMP POC within 8 hours of approval.
- (g) Return disapproved requests to the requestor within 8 hours of action, with explanations for disapproval and recommended actions.

E-3. Process oversight and review

- a. Commanders and supervisors will—
- (1) Conduct day-to-day reviews of work area, technical documentation, training, and job orders to identify potential new hazards and/or personnel risks, changes in processes, HM, or waste streams or needed business process reengineering, and review HM management application report screens or reports biweekly to identify possible process and or training changes that will reduce risks to personnel, reduce HM acquisition, or reduce HW generation.
- (2) Review approved processes at least every 5 years to validate or update the requirement, update procedures and equipment as required, and identify potential pollution prevention opportunities.
- (3) Complete an authorization request, as required, and notify the facilities management or utilities operations offices.
 - b. The environmental office personnel will—
- (1) Check the HMMA AUL and issue exception logs regularly to identify HM issues requiring an AUL review or change and take immediate corrective action.
- (2) Review processes, HMMA exception reports, HMMA MSDS records, and HM currently used to identify and update training requirements.
 - (3) Review and update existing algorithms or create new algorithms, as required, concurrently with process reviews.

Glossary

Section I

Abbreviations

ADBM

application database manager

AR

Army Regulation

ARNG

Army National Guard

AST

authorized stockage list

AUL

authorized use/user list

CFR

Code of Federal Regulations

CONUS

continental United States

CRP

central receiving point

DA

Department of the Army

DCS, G-4

Deputy Chief of Staff, G-4

D-DPWL

director-directorate of public works and logistics

DIS

directorate of installation support

DOD

Department of Defense

DODI

Department of Defense instruction

DOIM

directorate of information management

DOL

directorate of logistics

DPW

directorate of public works

DPWI

directorate of public works and logistics

eHMMP

environmental aspects of the hazardous material management program

ED

environmental division

EO

Executive Order

EPA

U.S. Environmental Protection Agency

EPCRA

Emergency Planning and Community Right-to-Know Act

EOCC

environmental quality control committee

FGS

final governing standards

GPC

Government purchase card

HM

hazardous material

HMCP

hazardous material control point

HMIRS

Hazardous Materials Information Resource System

HMMA

hazardous material management application

нммр

hazardous material management program

HQ

he adquarters

HS

hazardous substances

HW

hazardous waste

ΙH

industrial hygiene

IMCOM

Installation Management Command

ISO

Organization for International Standardization

JFH

Army National Guard Joint Force Headquarters

MSDS

material safety data sheet

NSN

national stock number

OCONUS

outside continental United States

ODS

ozone depleting substance

OSHA

Occupational Safety and Health Administration

PPF

personal protective equipment

POC

point of contact

SOP

standard operating procedure

STARC

State area command

TM

technical manual

TPO

threshold planning quantity

UBL

unit of basic load

USC

United States Code

VOC

volatile organic compound

Section II

Terms

Notice of violation

A citation issued by a regulatory organization that may be accompanied by fine.

Unit of issue (UI)

The standard quantity of product associated with a NSN or national item identification number.

Unit of use (UU)

The smallest container of a hazardous material associated with an operational or maintenance process.

Virtual hazardous material control point

A control point that uses software to manage and control HM on an installation, but does not physically receive, store, and issue HM.

Section III

Special Abbreviations and Terms

This section contains no entries.

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